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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/674,195	09/29/2003	Markus Meierhofer	0275Y-000801	4775
27572	7590	08/02/2005	EXAMINER	
HARNESS, DICKEY & PIERCE, P.L.C. P.O. BOX 828 BLOOMFIELD HILLS, MI 48303			COLLINS, GIOVANNA M	
			ART UNIT	PAPER NUMBER
			3672	

DATE MAILED: 08/02/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b> 10/674,195	<b>Applicant(s)</b> MEIERHOFER, MARKUS	
	<b>Examiner</b> Giovanna M. Collins	<b>Art Unit</b> 3672	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
  - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
  - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
  - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 29 September 2003.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-38 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-7, 9-15, 17-29, 31-36 and 38 is/are rejected.
- 7) ☒ Claim(s) 8, 16, 30 and 37 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |                                                                                                                                                       |                                                                                         |
|-------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                                                                           | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                                                  | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>20040316, 20030929</u> | 6) <input type="checkbox"/> Other: _____                                                |

## **DETAILED ACTION**

### ***Specification***

The disclosure is objected to because of the following informalities: On page 12, paragraph 0046, line 5 the phrase "12b" should be changed to -- 12d --.

Appropriate correction is required.

### ***Claim Rejections - 35 USC § 112***

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 9-10,27,29 and 31-32 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Regarding claims 27 and 29, the phrase "for example" renders the claim indefinite because it is unclear whether the limitation(s) following the phrase are part of the claimed invention. See MPEP § 2173.05(d).

Regarding claims 9-10 and 31-32, a broad range or limitation together with a narrow range or limitation that falls within the broad range or limitation (in the same claim) is considered indefinite, since the resulting claim does not clearly set forth the metes and bounds of the patent protection desired. See MPEP § 2173.05(c). Note the

explanation given by the Board of Patent Appeals and Interferences in *Ex parte Wu*, 10 USPQ2d 2031, 2033 (Bd. Pat. App. & Inter. 1989), as to where broad language is followed by "such as" and then narrow language. The Board stated that this can render a claim indefinite by raising a question or doubt as to whether the feature introduced by such language is (a) merely exemplary of the remainder of the claim, and therefore not required, or (b) a required feature of the claims. Note also, for example, the decisions of *Ex parte Steigewald*, 131 USPQ 74 (Bd. App. 1961); *Ex parte Hall*, 83 USPQ 38 (Bd. App. 1948); and *Ex parte Hasche*, 86 USPQ 481 (Bd. App. 1949). In the present instance, claims 9 and 31 recite the broad recitation "between 35% and 70% of the circumferential surface", and the claim also recites "in particular between 40% and 60%" which is the narrower statement of the range/limitation. Claims 10 and 32 recite the broad recitation "between 40% and 80% of the diameter", and the claim also recites "in particular between 40% and 60%" which is the narrower statement of the range/limitation.

### ***Claim Rejections - 35 USC § 102***

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

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2. Claims 1-7,9-12,17-29,31-33, and 38 are rejected under 35 U.S.C. 102(b) as being anticipated by Peetz WO 01/66899.

Referring to claims 1,4, 22, 24, and 26, Peetz discloses (fig 1) a masonry or rock drilling tool suitable for use with a rotary hammer comprising: a drilling head (2) at a forward end of the tool, a forwardly extending cutting plate(22) formed with said drilling head, first and second opposing axially extending channels (35) formed on the circumferential periphery of said drilling head; a clamping shank (12) at a rearward end of the tool suitable for fitment within a tool holder of a rotary hammer, an intermediate helical conveying portion extending between the drilling head and the clamping shank, four helically extending flutes (17-20) separated by corresponding helically extending webs (6-9) formed on said intermediate helical conveying portion; a central chiseling dome (top of element 22) and a pair of cutting edges (32) extending radially outwardly from the chiseling dome formed on said cutting plate, each cutting edge has a trailing relief face and an acute angle between the relief face (31) and the longitudinal axis of the tool varies from a radially inner portion to a radially outer end of each cutting edge; and said first axially extending channel (34) extends axially rearwardly from a forward facing face of the drilling head into a plurality of the at least four flutes and said second axially (35) extending channel extends axially rearwardly from the forward facing face of the drilling head into a different plurality of the at least four flutes.

Referring to claims 2 ,7,27,29, Peetz discloses the acute angels (at 32) increases from the inner to outer end of the cutting edge.

Referring to claims 3 and 23, Peetz discloses the webs (6-9) that separate the flutes each terminates at a location circumferentially central of the associated extending channel.

Referring to claims 5 and 25, Peetz disclose the cutting plate extends across the drilling head and the first channel (35) is formed on a first side and the second channel is formed on a opposite side.

Referring to claims, 6, 28, Peetz disclose cutting edge (32) forms a boundary between a cutting face (33) and a relief face (31).

Referring to claims 9-10,31-32 as best understood by the examiner, Peetz discloses the channels (35) extend between 35-70 % of the surface of the drilling head and have bases with a diameter of between 40 and 80 % of the diameter of the drilling head.

Referring to claims 11 33, Peetz disclose the channels (35) are substantially parallel to the longitudinal axis.

Referring to claims 17 ,19,38 Peetz disclose the webs have a radially outward facing surface (13-16).

Referring to claim 18, Peetz disclose two primary (6,7) and two auxiliary (8-9) webs.

Referring to claim 20, Peetz discloses the auxiliary webs (8,9) come to appoint at here radial outer ends (see fig. 1b at 8).

Referring to claim 21, Peetz disclose the auxiliary webs (8,9) separate the flutes into each extending channels (35) and the auxiliary web terminate in a circumferentially central portion of the corresponding channel.

***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 13-15 and 34-36 are rejected under 35 U.S.C. 103(a) as being unpatentable over Peetz in view of Rumpp et al. 5,265,688.

Referring to claims 13,14, and 34-35Peetz does not disclose auxiliary cutters. Rumpp teaches (fig. 1) to drilling tool with auxiliary cutters (5) that trail a cutting edge of a cutting plate (7) in the direction of rotation. As it would be advantageous to have auxiliary cutters to break the material, it would be obvious to one of ordinary skill in the art at the time of the invention to modify the tool disclosed by Peetz to have auxiliary cutters as taught by Rumpp.

Referring to claim 15 and 36, Peetz does not teach an auxiliary channel. Rumpp teaches an auxiliary channel (10) between auxiliary cutter and the cutting plate. This channel helps to flush material removed by the auxiliary cutter. As it would be advantageous to have a means to easily flush the material removed by the auxiliary

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cutter, it would be obvious to one of ordinary skill in the art at the time of the invention to modify the tool disclosed by Peetz to have an auxiliary channel as taught by Rumpff.

### ***Allowable Subject Matter***

5. Claims 8,16,30,37 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

### ***Conclusion***

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. U. S. Patent 6742610 to Peetz.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Giovanna M. Collins whose telephone number is 571-272-7027. The examiner can normally be reached on 6:30-3 M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David J. Bagnell can be reached on 571-272-6999. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR.



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Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>.

Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

*gm*  
gmc

*Francis*  
*for Dave*  
**David Bagnell**  
**Supervisory Patent Examiner**  
**Technology Center 3670**